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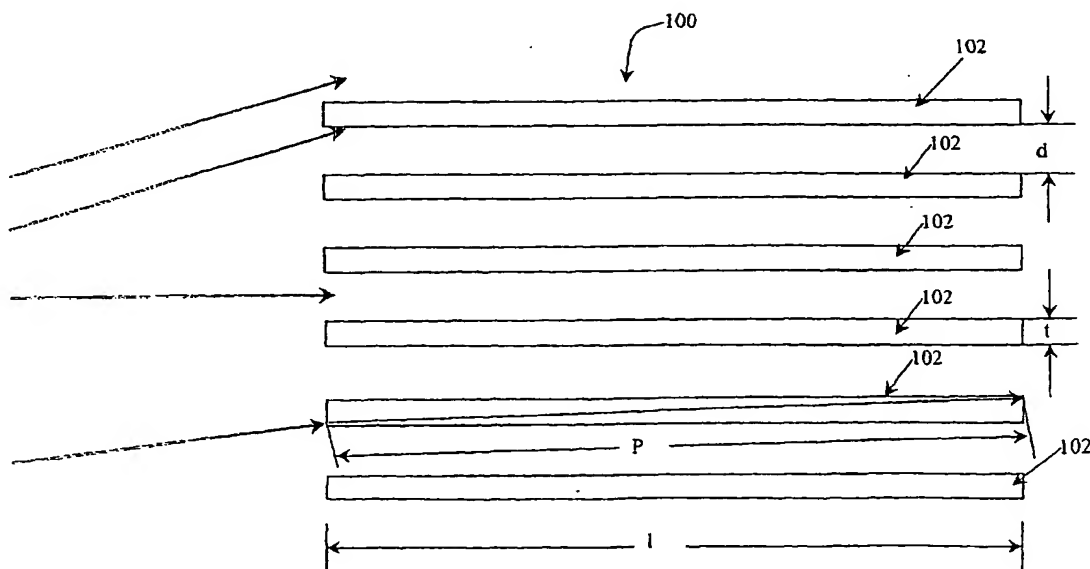
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(54) Title: **SOLLER SLIT USING LOW DENSITY MATERIALS**



(57) Abstract: A Soller slit device is provided for collimation of high energy radiation, such as X-ray or EUV radiation, and has a low angle of divergence (less than 0.1°) and a high transmission efficiency (60 to 80% or greater). The Soller slit is made up of multiple blades of low-density material, such as glass, mica, or the like, which are treated to reduce reflectivity. The Soller slit device of the invention advantageously provides an increased peak intensity and decreased peak width in diffraction patterns produced in high energy diffractometry applications, such as X-ray diffractometry.

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